## APPENDIX A

BENCHMARK CHARACTERISTIC ANALYSIS OF DATA FROM FIXED STATIONS IN THE LOWER WHITE RIVER WATERSHED 1991 TO 1997

Station: WR-19

SIGNOIL WYN. 19					-					-									-	
			Confid.	Confid						Upper	J	Suartile			Standard		Std.Err.		Std.Err.	
	Valid N	Mean	-95.000%	+95.000%		Sum	Minimum	Aaximum (	_	_	-					٠,	kewness	Kurtosis	Kurtosis	
Alkalinity (mg/l)	6	177	158.8887	195.1113		3363	6	236								_	.523767	205712	1.01427	
Ammonia (mg/l as N)	-8	0.081579 0.047299 0.115859	0.047299	0.115859	90.0	1.55	0.05	0 3	0.05	0 05	0.25	0	0.005058	0.071123	0.016317	2.291169 (	0.523767	4.568759	1.01427	
BOD (ma/l)	9	2.225	1.142098	3.307904		35.6	0.5	2.5								_	564308	1742148	.090774	
COD (ma/)	6	19.87368	15.47485	24.27252		377.6	65	<del>-</del>								_	.523767	.660467	1.01427	
Cyanide (mg/l)	<b>œ</b>	0.005278	0.004692	0.005864		0.095	0.005	0.01						_		_	536278	<b>£</b>	.037795	
Nirate (mg/las N)	19	1.852832	1.427449	2 277814		35.2	0.3	e				_		_		_	523767	-1.1421	1.01427	
Total Phosphorus (mg/l as P)	19	0.217895	0.144965	0.290825		<del>*</del> .	0.07	0.59				_		_		_	523767	124787	1.01427	
Total Solids (mg/l)	<b>6</b>	454,1053	390.2839	517.9166		8628	320	068						•••		_	523767	.243894	1.01427	
Suspended Solids (ma/l)	19	104.6842	61.34607	148.0224		1989	35	313				_				_	523767	.238865	1.01427	
Dissolved Solids (ma/l)	7	314.4286	231.4311	397.426		2201	232	509				_		• •		_	.793725	5.28218 1	587451	
Sulfate (mo/l)	7	51.28571	29.66387	72.90756		359	32	100						_		_	783725	3.71464 1	.587451	
TKN (mg/ as N)	7	0.842857	0.610986	1.074728		5.9	9.0	1.3				_		_		_	793725 (	702893 1	.587451	
E. coli (CFU/100ml)	62	489.2105	-168.585	1147.006		9538	s,	0009						•••		_	523767	. 17.071	.01427	
TOC (ma/l)	7	3.514286	2.710807	4.317764		24.6	5.4	8.4				_		_		_	793725	1.25437 1	.587451	
Hardness (ma/l)	19	235.7368	211.5244	259.9493		4479	143	324				•••		•		_	523767	0.2503	.01427	
Chloride (ma/l)	7	29.14286	15.75729	42.52842		204	5	58				•••				_	783725	552324 1	587451	
Dissolved Oxygen (mg/l)	16	10.02188	8.947549	11.0962		160 35	6 67	14.7						_		•	564308 0	637508 1	.090774	
H	16	7.989375	7.808982	8.169768		127 83	717	8.46				_		_		_	564308	1.06669 1	.090774	
Cooper (ua/l)	80	5.95	3,13719	8.76281		47.6	7	Ξ						•		•	752101	1.10176	48088	
Iron (ua/l)	80	2491.25	1084.352	3898,148		19930	770	5800								_	752101	. 366996	48088	
Zipc (1100)	80	13.975	8.360618	19.58938		111.8	5.7	54				•		•••		_	752101	1.53936	48088	

پزر	318	5	176	920	178	904	178	176	178	176	.78	177	176	223	78	176	111	257	492	9 3	50 S	<b>9</b>	
Std.Err.														-		_	_	_	_			3 0.541	
:	Xurtos:	0.92469	17.5824	2.40029	55.3869	26.23025	70.3076	62.8879	25.5434	7.53626	0.70513	0.69520	53.7406	10.9609	15.6062	0.41111	1 29390	0 52930	0.80881	52.6250	63 0034	52.8569	
Std.Err.	ewness.	0.273908	272211	392544	272211	0.275837	272211	272211	272211	272211	490962	472261	272211	281029	490982	272211	472281	311178	308694	273908	275637	273908	
						-1.30747 0							_	-	_	_	_	_	_	-	_	_	
Standard																						3.6117	
	Sid.Dev	45.99919	0.08360	1.93526	20.93100	0.000822	4.89482	0.28444	185.9143	95.34504	87.86049	25.72087	1.04093	833.3784	1.60279	59.8116	15.9945	1.613432	0.37498	8.223336	7889.32	31.6927	
	Brian 20	115 925	66900	74523	18,1093	6.8E-07	1.95927	.08091	564.14	229.060	19.465	1.5634	083539	4521.2	568939	77.437	5.8243	603163	14061	62325	2E+07	04 428	
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	_					600.0	-														۳	~	
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Lower	Quartile	149	0 05	1 25	<del>.</del>	0.005	7.7	0.12	37.1	37	276	7	0 7	ဓ	3.1	200	7	9 1	7.88	7	100	2	
	Maximum	322	9.0	9.5	190	600.0	<del>1</del>	2.56	1690	534	534	120	6	4400	10.6	<b>4</b>	7.	13.5	8.64	71	68000	270	
	_					0																	
	Sum	13687	8.95	7 76	1707.3	0.385	185.35	15.92	35847	7086	7245	1397	85.85	28750	86.5	18666	749	598 44	483 62	461	237300	1487 95	
-	Median	177	0.05	2.35	18.7	0 00	8	0.15	424.5	56.5	317	20	60	8	3.65	243	26 5	10.2	8.12	9	1500	<b>6</b>	
onfid	2.000%	8.1938	07953	68687	60769	05254	79894	68235	1 4941	2 3431	8 2733	06931	35335	8 2774	42458	2.7931	96222	56351	57201	53481	25.155	19.32403 12.13066 26.51739	
5	6+ %00	3127 18	252 0.1	3.091	90 70	1878 0 0	871 3.4	997 0 2	5697 50	11 2161	363 36	1736 69	5947 13	1938 58	118 46	1222 25	3445 37	588 10	1468 81	545 78	582 49	12 13066 26.517	
S	-95.0	187	0 0 0 0	20 0 05	18 47 46	9000	1 272	0 13	417.6	15 69 34	290	72.7	11 0 86	58 199 3	322	77 225 8	13 24 4	27.0 27.2	7 96	13 4 120	1319	3 12 13	
	Mean	177.75	0.0891	2 7 1 3 8	21 888,	0000	2 3782	0 2041(	450 57	00 846	120 14	58 208 X	1 1006	107 83	303.00	219.30	34 208		0803	A 0870	1122 36	19.32403	
	N bile/	7.7	. 4	2 2	5 F	2 4	9 6	9 6	) G	2 6	2 2	3 7	, ,	2 5	2 5	3 5	2 7	,	n c	3 2	. 4	2.2	
		-						í	( L SE L	4	₹.	_						,	€				
. 9				) as v)			- 1 - 1	(Z	SEL) SPIC	(I/Bu	BLL) Spilo	(mg/l)	1	2 S	(IEO	4	£.	-	,gen (mg				
Station: WR-46			Alkalinity (mg/l)	Ammonia (mg/l as N)	BOD (mg/l)	COD (mg/l)	yanide (mg/l)	Intate (mg/l as N)	lotal Phosphorus (mg/l as P)	rotal Solids (mg/l)	Suspended Solids (mg/l)	Dissolved Solids (mg/l)	Sulfate (mg/l)	(N se l/gm) NXI	E. coli (CFU/100MI)		Hardness (mg/l	Chioride (mg/l)	Dissolved Oxygen (mg/l)		Copper (ug/i)	iron (ug/i) Zinc (ug/l)	
Stat		:	AKa.	<b>TEV</b>	800	000	Š		o ta	Tota	Sus	S :	Sulf	Ž,	ıi i	3	E C	2	. :	E,	ි වී	Zi 2	

Station: V/R-162  Alkalimity (mg/l) Ammonia (mg/l as N) BOD (mg/l) COD (mg/l) Cyanide (mg/l) Cyanide (mg/l) Total Phosphonus (mg/l as P) Total Solids (mg/l) Suspended Solids (mg/l) Suspended Solids (mg/l) Suspended Solids (mg/l) Foci (CFU/100ml) TOC (mg/l) Hardness (mg/l) Chloride (mg/l) Dissolved Oxygen (mg/l) Dissolved Oxygen (mg/l) PH Copper (ug/l) Iron (ug/l)	Alkatinity (mg/l) Ammonia (mg/l as N) BOD (mg/l) COD (mg/l) Cyanide (mg/l) Nitrate (mg/l as N) Total Phosphorus (mg/l as P) Total Solids (mg/l) Suspended Solids (mg/l) Suspended Solids (mg/l) Sustate (mg/l) TKN (mg/l as N) E. cok (CFU/100ml) TCO (mg/l) Hardness (mg/l) Chloride (mg/l) Dissolved Oxygen (mg/l) Dissolved Oxygen (mg/l) Copper (ug/l) Iron (ug/l) Zinc (ug/l)
Valid N 72 72 72 72 72 72 72 72 72 72 72 72 72	Valid N 78 22 22 22 23 23 23 23 23 23 25 26 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29
Mean 218.8333 0 129881 4 276481 1 27.45556 0 0.05338 2.455556 0 0.30998 510.5 91.54545 91.54545 1 290909 476.5217 4 863636 1 803636 1 803636 1 803636 1 803636 1 803636	Mean 186,7132 0.098077 3.816667 2.1.9584 0.005 1.64359 0.249808 44,4592 184,32895 397,2727 75,54545 397,2727 75,54545 397,2727 75,54545 397,2727 75,54545 14,04544 4,204545 253,5921 14,18261 14,18261
Confid. 95,000% 10,093,58 11,174 119,648,55 10,005,05 10,005 10,0	Confid -95,000% 176,8624 0 073537 2 880085 19 90527 1 419805 0,221023 473,2503 68,58915 57,85975 0,785975 0,785975 186,072 3,759856 186,072 3,759856 10,25178 8,005722 3,335876 10,3135876 10,3135876
Confid. % +95.000% 7 227.9929 80 0.165365 48 0.2636497 50 0.005626 80 2.695575 80 2.65575 81 1.79.7611 1.79.7611 1.59.7755 1.510223 1.705.5698 1.510233 1.705.5698 1.707.55598	Confid % +95.000% 4 196.5639 7 0.122617 5 4753269 7 24.01181 5 1.867375 3 0.278592 3 0.278592 5 102.0887 5 451.8404 5 93.23116 6 4.669255 7 265.12652 5 2 542.0361 6 4.669255 7 265.51266 8 11.13755 2 8 220041 6 5 507602 2 3184.253 5 18.05171
Mediar 27.5 28.7 29.27.5 67.3.6 67.3.6 67.3.6 68.7 69.7 60.005 60.00	Median 194 17 005 194 17 005 18 21 18 21 18 21 18 22 18 47 19 47 1
an Sum 5 15756 9 35 10 158.7 10 0379 176.8 5 28 151.3 39689 1776.8 2014.4 22 4 22 4 23 4 27 17 17 17 17 17 17 17 17 17 17 17 17 17	14190 2 7.65 137.4 1690, a 1690, a 1690, a 1690, a 1692, a 19485 37589 6409 6409 6409 6409 6409 6409 6409 640
m Minimum 56 77 5 0.05 5 0.05 5 0.05 9 0.005 9 0.005 9 10 0 1 269 1 140 0 5 1 7 87 1 7 87 1 7 87 1 88 1 88 1 88 1 8	Minimum  10 2 8.2  10 0.5  10
Maximum Qi 299 0.8 1 3 57.3 1 57.3 1 6.014 0 4.5 1 113 0 984 8 827 190 2 2.3 2 5500 8.9 8 8.9 8.9 1 15.5 1 15.5 1 16.2 1 16.2 1 16.2 1 16.2 1 16.2 1 16.2 1 16.3 1	ä
Lower Countile Counti	Lower Cuartile Cuartile C 164 0 05 1 75 1 75 1 75 1 75 2 2 2 5 5 2 2 2 5 5 2 2 2 5 5 2 2 2 5 5 2 2 2 5 5 2 2 2 5 5 2 2 5 5 2 2 2 5 5 2 2 5 5 2 2 5 5 2 2 5 5 2 2 5 5 2 2 5 5 5 2 2 5 5 5 2 2 5 5 5 2 2 5 5 5 2 2 5 5 5 2 2 5 5 5 2 2 5 5 5 7 4 7 4 7 4
Upper Quarrile 245 2 6.4 0.005 3.1 0.005 3.1 0.575 6.18 6.29 1.20 1.8 6.29 1.10 1.15 1.20 1.15 1.20 1.15 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20	Upper Quarille 211 5 0 1 5 2 5 2 8 2 8 4 2 9 6 5 6 5 2 4 0 1 6 6 5 2 4 0 0 1 6 0
Range 222 0 75 12 5 12 6 14 8 3 4 8 3 4 4 5 1 0 9 7 4 2 7 4 4 5 5 8 1 5 9 1 7 9 1	Range 254.8 0.65 9.5 39.5 39.5 456 403 442 149 2.261 87 7.64
Quartile Range 47 0.05 3 3 10 85 0 1.3 0.38 171 34 282 70 7 370 2 1 4 3 7 6 6 3 0 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Quartile Range 47.5 0.05 3.2 13 1 8 0.11 100.5 48.5 48.5 200 1.1 63.5 3.2 2.15 0.55 4.5 3.2 2.15 0.5 5.5 4.5 3.2 2.15 0.5 5.5 4.
Variance 172.46394 11.5398 72.46394 11.55.06 10.43279 0.077947 20801.39 20801.39 209101.7 2.502424 4811.345 1858.719 1858.719 1858.719 1858.719 1858.719	Variance 1855,349 0.011947 0.011947 81 82878 9 985153 0 985153 0 016239 8722,698 6040,41 15147,06 15147,10 15147,06 15147,10 1590161,4 1,09855 2547,898 701,4221 2,637,211 0 169086 6 305413 3 60 10131 3 60 10131 3 60 005423
Sid Dev. 3.197887 0.15:37887 0.15:3787 0.15:3757 0.10:1218 1.00:12	Sid Dev. 43.10857 0 108843 2 768135 9 045926 0 992549 0 127667 93.39539 77.72008 173.0734 39.301549 768.2196 1.048117 28.48437 1.684402 0.411201 2.511659 2.147.122 8.947303
Standard Error 7 0 193704 1 0 183077 1 0 183077 7 0 572784 6 1 003217 6 1 003217 6 1 0032903 9 16 8973 9 10 52614 1 1 32457 3 35 71992 9 10 52614 5 0 337263 6 8 174609 6 8 191692 6 8 191692 7 407 4636 6 1 698875	Sid.Dev Error 43.10857 4 944893 0 108843 0 012324 2 768135 0 481356 9 045926 1 030879 0 992549 0 112384 0 127667 0 1014456 9 393539 10.71319 77.72008 8.915104 123.0734 28.2934 29.2934 29.2934 29.2934 29.2934 29.2934 29.2934 29.2934 29.2934 29.2934 29.2935 29.4934 29.2934 29.2934 29.2934 29.2935 29.495 29.495 29.495 29.495 29.495 29.495 29.495 29.495 29.495
rd Skewness	Standard Skewness Error Skewness 4 944893 -1.10682 0 012224 3.174805 0 461356 0 927022 1 030879 0 164323 0.112384 -0.17675 0.014455 1.144846 10,71319 0.832705 8.515104 2.258629 26.23934 0.926926 8.504322 1.3133 0.10458 0.115158 8.904372 2.962996 0.223459 -0.21107 5.790076 -0.45195 5.646488 0.936274 0.221173 0.535612 0.053534 -0.8986 0.523592 0.513403 457.7879 1.777838 1.865642 1.604383
Stewness Skewness Kurtosis -0.9722 0.28289 1.659814 2.622854 0.282898 1.559814 2.522854 0.282898 1.557874 1.230328 0.403053 0.806148 1.335158 0.282898 3.156557 5.60925 0.284805 37.28058 5.60925 0.284805 37.28058 0.644079 0.282898 0.486209 0.470131 0.490962 -0.84632 0.728358 0.490962 -0.16831 0.644072 0.490962 -0.16831 0.56094 0.490962 0.417884 2.076416 0.282898 13.78709 0.435059 0.490262 -1.136709 0.435059 0.490262 -1.136709 0.436059 0.490262 -1.136709 0.436059 0.490362 -1.136789 0.508865 0.481337 -1.12743 3.886184 0.481337 6.122422	Variance Sid Dev Error Skewness Skewness Kurtosis 1855 349 43.10857 4 944893 -1.10682 0.275637 2.703538 0011847 0 108843 0 012324 3174805 0 2772211 12.44458 7 662571 2.768135 0 461335 0 927022 0 392544 0 15397 81 62878 9 045926 1 03087 9 0164323 0 273908 -0.73786 0 985153 0 992549 0.112384 -0.17675 0 272211 -0.89396 0.16299 0 127667 0.014455 1.144846 0 272211 1282464 6040,41 77.72008 8.915104 2.258629 0.275637 0 350924 6040,41 77.72008 8.915104 2.258629 0.275637 5 499286 15147.06 123.0774 26.23934 0 926926 0.49062 0.294643 1591.117 39.88881 8.504322 1.3133 0.490962 0.296443 1591.117 39.88881 8.504322 1.3133 0.490962 0.296443 1591.117 39.88881 8.504322 1.3133 0.490962 10.36966 0.251551 0.501549 0.10458 0 0.15158 0 481337 0.264618 1591.117 39.88881 8.504322 1.3133 0.490962 10.36966 0.251551 0.68117 0.23459 -0.21107 0.490962 -0.46605 2547.898 50.47671 5.790076 -0.45195 0.275637 0.50371 1.08455 1.048117 0.23459 -0.21107 0.490962 -0.0943 2.87211 1.684402 0.221173 0.535612 0.31372 0.519967 0.690968 0.411201 0.053534 -0.8966 0.311176 0.85964 1.07133 0.490962 3.073648 6.00133 2147.122 457.7679 1.777838 0.490962 3.073684 80.05423 8.947303 1.865642 1.604383 0.481337 2.72056 80.05423 8.947303 1.865642 1.604383 0.481337 2.72056
Err. Kurtosis 1.659814 1.659814 1.659816 1.659816 1.65981 1.	·
SId.Err. Kurtosis 0.558831 0.558831 0.558831 0.558831 0.558831 0.558831 0.558831 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278	Sid Err. Kurtosis 0.544804 0.768076 0.768076 0.538176 0.538176 0.538176 0.538176 0.544804 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278 0.95278

## APPENDIX B

LOWER WHITE RIVER WATERS ASSESSED IN THE CLEAN WATER ACT SECTION 305(B) REPORT 1996 TO 1998

Segment Number: 00 Waterbody ID : IN05120202010

Waterbody Name: Bean Blossom Creek Waterbody Type: River Basin: WHITE RIVER Size: 114.40 Miles

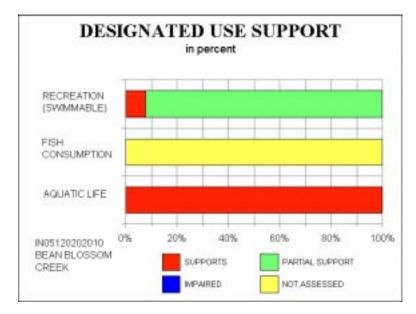
----- Description of the Waterbody

No description available

Assessment Date: 9804

----- Use Support -----

Designated Use	Fully Supp	Threat	Partial Supp	Not Supported	Not Attained	Not Assessed
AQUATIC LIFE SUPPORT	114.40	0.00	0.00	0.00	0.00	0.00
FISH CONSUMPTION	0.00	0.00	0.00	0.00	0.00	114.40
SWIMMABLE	8.80	0.00	105.60	0.00	0.00	0.00



----- Nonattainment Causes -----

Cause Size Mag

1700-PATHOGENS 105.60 S

----- Nonattainment Sources -----

Source Size Mag

9000-SOURCE UNKNOWN 105.60 S

Waterbody ID : IN05120202020 Segment Number: 00

Waterbody Name: W.F.White River Basin (Bean Blossom to Buckhall Cr)
Waterbody Type: River Size: 162.2 162.20 Miles

Basin: WHITE RIVER

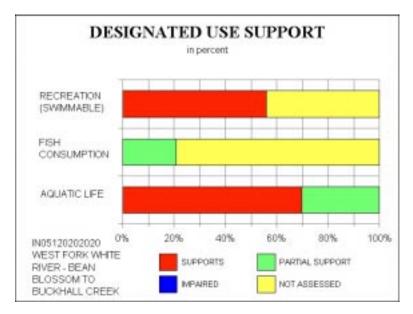
----- Description of the Waterbody

No description available

Assessment Date: 9804

----- Use Support -----

Designated Use	Fully Supp	Threat	Partial Supp	Not Supported	Not Attained	Not Assessed
AQUATIC LIFE SUPPORT	113.30	0.00	48.90	0.00	0.00	0.00
FISH CONSUMPTION SWIMMABLE	0.00 90.70	0.00	33.60	0.00	0.00 0.00	128.60 71.50



----- Nonattainment Causes -----Cause Size Mag

0410-PCBs 33.60 M 0500-METALS 33.60 S 33.60 S 0560-Mercury

Source Size Mag

9000-SOURCE UNKNOWN 33.60 S

Segment Number: 00 Waterbody ID : **IN05120202030** 

Waterbody Name: Lattas Creek Basin Waterbody Type: River Basin: WHITE RIVER Size: 35.00 Miles

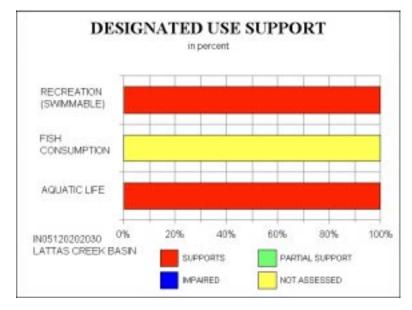
----- Description of the Waterbody

No description available

Assessment Date: 9804

----- Use Support -----

Designated Use	Fully Supp	Threat	Partial Supp	Not Supported	Not Attained	Not Assessed
AQUATIC LIFE SUPPORT	35.00	0.00	0.00	0.00	0.00	0.00
FISH CONSUMPTION	0.00	0.00	0.00	0.00	0.00	35.00
SWIMMABLE	35.00	0.00	0.00	0.00	0.00	0.00



----- Nonattainment Causes -----

Cause Size Mag

No causes listed

----- Nonattainment Sources -----

Source Size Mag

No sources listed

Waterbody ID : **IN05120202040** Segment Number: 00 Waterbody Name: W.F.White River Basin (incl. Richland Creek Basin)
Waterbody Type: River Size: 141
Basin: WHITE RIVER

141.10 Miles

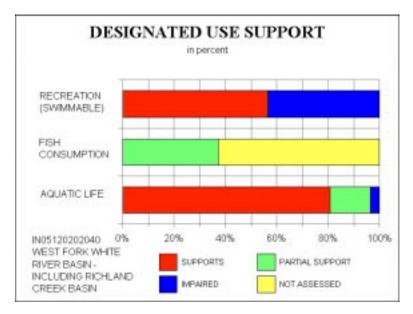
----- Description of the Waterbody

No description available

Assessment Date: 9804

----- Use Support -----

Designated Use	Fully Supp	Threat	Partial Supp	Not Supported	Not Attained	Not Assessed
AQUATIC LIFE SUPPORT	114.00	0.00	22.00	5.10	0.00	0.00
FISH CONSUMPTION	0.00	0.00	52.60	0.00	0.00	88.50
SWIMMABLE	79.80	0.00	0.00	61.30	0.00	0.00



----- Nonattainment Causes -----

Cause	Size	Mag
0410-PCBs	52.60	М
0500-METALS	52.60	S
0560-Mercury	52.60	S
1700-PATHOGENS	61.30	S

----- Nonattainment Sources

Source Size Mag 6000-LAND DISPOSAL 33.50 M 61.30 S 9000-SOURCE UNKNOWN

Waterbody ID : **IN05120202050** Segment Number: 00

Waterbody Name: W.F.White River (Richland to Black Cr)
Waterbody Type: River S
Basin: WHITE RIVER Size: 157.20 Miles

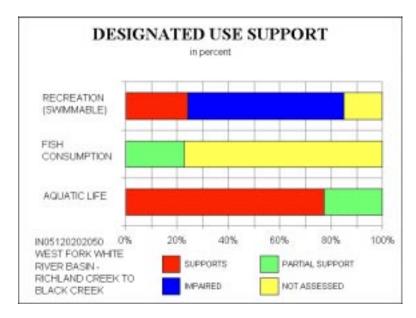
----- Description of the Waterbody

INCLUDES FISH CR

Assessment Date: 9804

----- Use Support -----

Designated Use	Fully Supp	Threat	Partial Supp	Not Supported	Not Attained	Not Assessed
AQUATIC LIFE SUPPORT	121.50	0.00	35.70	0.00	0.00	0.00
FISH CONSUMPTION	0.00	0.00	35.70	0.00	0.00	121.50
SWIMMABLE	37.80	0.00	0.00	95.80	0.00	23.60



----- Nonattainment Causes -----

Cause	Size	Mag
0410-PCBs	35.70	M
0500-METALS	35.70	S
0560-Mercury	35.70	S
1700-PATHOGENS	95.80	S

------ Nonattainment Sources ------

Source Size Mag

9000-SOURCE UNKNOWN 95.80 S

Waterbody ID : **IN05120202060** Segment Number: 00

Waterbody Name: Black Creek Basin Waterbody Type: River Basin: WHITE RIVER Size: 70.90 Miles

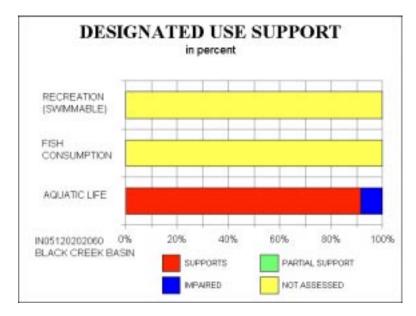
----- Description of the Waterbody

No description available

Assessment Date: 9804

----- Use Support -----

Designated Use	Fully Supp	Threat	Partial Supp	Not Supported	Not Attained	Not Assessed	
AQUATIC LIFE SUPPORT	64.90	0.00	0.00	6.00	0.00	0.00	
FISH CONSUMPTION	0.00	0.00	0.00	0.00	0.00	70.90	
SWIMMABLE	0.00	0.00	0.00	0.00	0.00	70.90	



----- Nonattainment Causes -----

Cause Size Mag

No causes listed

----- Nonattainment Sources -----

Source Size Mag

No sources listed

Waterbody ID : **IN05120202070** Segment Number: 00

Waterbody Name: W.F.White River Basin (incl. Pond, Indian, Veales Crks.)
Waterbody Type: River Size: 209.90 Mi
Basin: WHITE RIVER 209.90 Miles

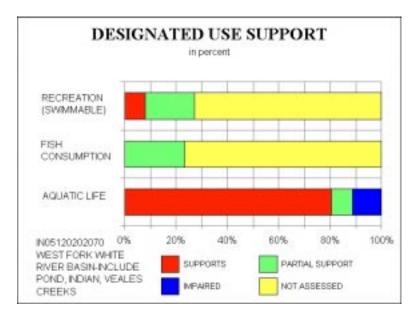
----- Description of the Waterbody

No description available

Assessment Date: 9804

----- Use Support -----

Designated Use	Fully Supp	Threat	Partial Supp	Not Supported	Not Attained	Not Assessed
AQUATIC LIFE SUPPORT	168.90	0.00	17.60	23.40	0.00	0.00
FISH CONSUMPTION	0.00	0.00	35.30	0.00	0.00	114.90
SWIMMABLE	16.90	0.00	40.40	0.00	0.00	152.60



----- Nonattainment Causes -----

Cause	Size	Mag
0410-PCBs	35.30	М
0500-METALS	35.30	S
0560-Mercury	35.30	S
1700-PATHOGENS	40.40	S

------ Nonattainment Sources ------

Source Size Mag

9000-SOURCE UNKNOWN 40.40 S

Waterbody ID : **IN05120202080** Segment Number: 00

Waterbody Name: Prairie Creek Basin Waterbody Type: River Basin: WHITE RIVER Size: 107.00 Miles

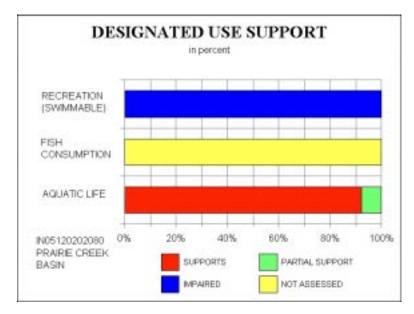
----- Description of the Waterbody

No description available

Assessment Date: 9804

----- Use Support -----

Designated Use	Fully Supp	Threat	Partial Supp	Not Supported	Not Attained	Not Assessed
AQUATIC LIFE SUPPORT	98.70	0.00	8.30	0.00	0.00	0.00
FISH CONSUMPTION	0.00	0.00	0.00	0.00	0.00	107.00
SWIMMABLE	0.00	0.00	0.00	73.70	0.00	0.00



----- Nonattainment Causes -----

Cause Size Mag

1700-PATHOGENS 73.70 S

----- Nonattainment Sources -----

Source Size Mag

9000-SOURCE UNKNOWN 73.70 S

Waterbody ID : **IN05120202090** Segment Number: 00

Waterbody Name: Prides Creek Basin Waterbody Type: River Basin: WHITE RIVER Size: 7.90 Miles

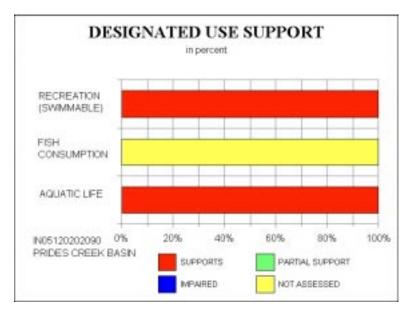
----- Description of the Waterbody

No description available

Assessment Date: 9804

----- Use Support -----

Designated Use	Fully Supp	Threat	Partial Supp	Not Supported	Not Attained	Not Assessed
AQUATIC LIFE SUPPORT	7.50	0.00	0.00	0.00	0.00	0.00
FISH CONSUMPTION	0.00	0.00	0.00	0.00	0.00	7.50
SWIMMABLE	7.50	0.00	0.00	0.00	0.00	0.00



----- Nonattainment Causes -----

Cause Size Mag

No causes listed

----- Nonattainment Sources -----

Source Size Mag

No sources listed

Waterbody ID : IN05120202100 Segment Number: 00

Waterbody Name: White River Basin (EF White R to Wabash R)
Waterbody Type: River Size: 126.50 Miles

Basin: WHITE RIVER

9000-SOURCE UNKNOWN

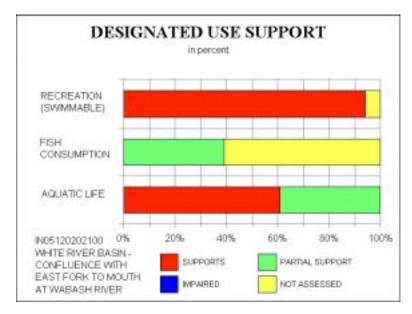
----- Description of the Waterbody

No description available

Assessment Date: 9804

----- Use Support -----

Designated Use	Fully Supp	Threat	Partial Supp	Not Supported	Not Attained	Not Assessed
AQUATIC LIFE SUPPORT	77.00	0.00	49.50	0.00	0.00	0.00
FISH CONSUMPTION	0.00	0.00	49.50	0.00	0.00	77.00
SWIMMABLE	119.00	0.00	0.00	0.00	0.00	7.50



49.50 M

## APPENDIX C

## Potential Stakeholders in the Lower White River Watershed

## Potential Stakeholders in the Lower White River Watershed

#### **Brown County**

Brown County Chamber-Commerce 37 W Main St Nashville, IN (812) 988-6647

Brown County Soil & Water 121 Locust Ln Nashville, IN (812) 988-2211

Cooperative Extension 802 Memorial Dr Nashville, IN (812) 988-5495

Health Office 201 Locust Ln Nashville, IN (812) 988-2255

Planning Commission 201 Locust Ln Nashville, IN (812) 988-5490

Surveyor's Office PO Box 37 Nashville, IN (812) 988-5500

Brown County Water Utility Inc 2349 State Rd 45 Helmsburg, IN (812) 988-6611

Brown County Solid Waste 121 Locust Ln Nashville, IN (812) 988-0140

Cooperative Extension Service 802 Memorial Dr Nashville, IN (812) 988-5495

Sewage Plant State Rd 46 S Nashville, IN (812) 988-7315

Yellowwood State Forest 772 Yellowwood Lake Rd Nashville, IN (812) 988-7945

#### **Daviess County**

Elnora City Hall 105 W Main St Elnora, IN (812) 692-5415

Waste Water Treatment PO Box 336 Elnora, IN (812) 692-5780

Water Dept PO Box 336 Elnora, IN (812) 692-5780

Odon Waste Treatment Plant Highway 58 Odon, IN (812) 636-7755

Odon City Hall 109 S Spring St Odon, IN (812) 636-4321

ENGINEER 204 Southeast 3rd Street Washington, IN 47501-3518 (812) 254-5798

SURVEYOR Courthouse 200 East Walnut Washington, IN 47501 (812) 644-7463

Daviess County Chamber of Commerce 1 Train Depot Street, PO Box 430 Washington, IN 47501 (812) 254-5262

Daviess County Cooperative Extension Office Courthouse Box 247, 214 Northeast 3rd Street Washington, IN 47501-0247 812-254-8668 Fax 812-254-7472 Daviess County Growth Council David R. Cox, Executive Director P.O. Box 191

Washington, Indiana 47501-0191

Phone: (812) 254-1500

USDA Rural Development 1484 Executive Boulevard Jasper, IN 46547 (812) 482-1171 Ex 4

Daviess County Soil and Water Conservation District 2524 E. National Hiway, Washington, IN 47581 (812) 254-4780

#### **Gibson County**

Gibson County Commissioners 101 N Main St Princeton, IN (812) 385-8260

Gibson County Extension Office 800 S Prince St # 35 Princeton, IN (812) 385-3491

Gibson County Surveyor 101 N Main St Princeton, IN (812) 385-4853

Gibson County Board Of Health 800 S Prince St # 24 Princeton, IN (812) 385-3831

Gibson County Solid Waste Dist 101 N Main St Princeton, IN (812) 385-3136

Gibson County Soil and Water Conservation District 229 S. Second Ave. Princeton, IN 47670 (812) 385-5033

#### **Greene County**

County Commissioners THOMAS BRITTON R.R. 1 BOX 19, SOLSBERRY, IN. 47459

WILLIAM SIPES R.R. 2 BOX 44, BLOOMFIELD, IN. 47424

THOMAS E. BAILEY R.R. 1 BOX 263, LYONS, IN. 47443

Health Department Frederick R. Ridge, M.D. Courthouse, Room GO4 Bloomfield, IN 47424-1469 Phone: (812) 384-4496

Hillenbrand Fish and Wildlife Area Managed by Minnehaha FWA 2411 E State Road 54 Sullivan, IN 47882 (812) 268-5640

Green County Farm Service Agency 30 W Indiana Ave Bloomfield, IN (812) 384-4634

Greene County Surveyor 217 E Spring St # 2 Bloomfield, IN (812) 384-2026

Linton Mayor's Office 86 Main St S Linton, IN (812) 847-7754

Linton Water Dept Water Works 86 Main Street S Linton, IN (812) 847-4604

Greene Sulivan State Forest 2551 S State Road 159 Dugger, IN (812) 648-2810

Greene County Solid Waste Mgmt Rr 1 Switz City, IN (812) 659-9955 Greene County Economic Development Corporation 132 E. Main Street, Suite 5, Bloomfield, IN 47424 812-384-3454, 812-384-8179 Jasonville Mayor 145 S Lawton St Jasonville, IN (812) 665-2266

Natural Resources Dept State Road 48 Jasonville, IN (812) 665-2207

Greene County Soil &Water Conservation District 30 W. Indiana Ave. Suite 2, Bloomfield, IN (812) 384-4636

Newberry Town Hall Highway 57 Newberry, IN (812) 659-3825

#### **Knox County**

Knox County Area Planning 111 N 7th St Fl 3 Vincennes, IN (812) 885-2544

Area Board of Zoning Appeals - Phone (812) 885-2544

Knox County Health Ofc 624 Broadway St Vincennes, IN (812) 882-8080

County Commissioner's 111 N 7th St Vincennes, IN (812) 885-2514

Knox County Solid Waste Mgmt 2758 E Pine Hill Dr # C Vincennes, IN (812) 895-4878

Knox County Surveyor 111 N 7th St Fl 4 Vincennes, IN (812) 885-2535

Knox County Soil and Water Conservation District 2015 Hart St. Vincennes, IN 47591 (812) 882-8210

Farm Service Agency 2013 Hart St Vincennes, IN (812) 882-8210

Vincennes Mayor's Office

201 Vigo St Vincennes, IN (812) 882-7285

#### **Martin County**

Martin County Commissioners Shoals, IN (812) 247-2756

Crane Town Hall 181 Larrimer St Crane, IN (812) 854-7866

Cooperative Extension Service 205 Main St Shoals, IN (812) 247-3041

Martin County Soil and Water Conservation District 203 Main St. PO Box 34 Shoals, IN (812) 247-2423

Naval Surface Warfare Center- Crane Division COMMANDER NAVSURFWARCENDIV CRANE 300 HIGHWAY 361 Crane IN 47522-5001

#### **Monroe County**

Building Department 812-349-2580 Courthouse, Room 310 Bloomington, IN 47404

County Commissioners Courthouse Room 322 Bloomington, IN 47404 812-349-2550 Iris F. Kiesling, President Brian O'Neill, Vice President Kirk R. White

Planning Department Courthouse Room 306 Bloomington, IN 47404 812-349-2560

Cooperative Extension Service 812-349-2543

Health Department 119 West Seventh Street Bloomington, IN 47404-3989 812-349-2542 Surveyor's Office 812-349-2570

Monroe County Soil and Water Conservation District 1931 Liberty Drive Bloomington, IN 47403 (812) 334-4318

#### Owen County

Owen County Commissioners Courthouse Spencer, IN (812) 829-5058

Chamber Of Commerce 51 E Franklin St Spencer, IN (812) 829-3245

Indiana State Owen-Putnam Frst 400 West St Spencer, IN (812) 829-2462

Owen County Soil & Water Conservation District State Rd 46 Spencer, IN (812) 829-2605

Owen County Adm 291 Vandalia Ave Spencer, IN (812) 829-4412 Owen County Cooperative Ext 180 S Washington St Spencer, IN (812) 829-5020

SURVEYOR 349 North Main Street Spencer, IN 47460 (812)829-9117

Owen County Health Department 60 South Main Street, Floor 1 Spencer, IN 47460 (812)829-5017

#### Pike County

Pike County Commissioners 801 Main St Fl 2 Petersburg, IN (812) 354-8448

Petersburg City Hall 704 Main St Petersburg, IN (812) 354-8511

Petersburg City Sewage Plant

High St Extended Petersburg, IN (812) 354-6691

Petersburg Water Dept 704 Main St Petersburg, IN (812) 354-8707

Pike County Extension Agent 801 Main St Petersburg, IN (812) 354-6838

Pike County Growth Council 714 1/2 Main St Petersburg, IN (812) 354-2271

Pike County Ofc Board-Health 801 Main St Petersburg, IN (812) 354-8796

Pike County Surveyor Office Court House Petersburg, IN (812) 354-9736

Pike County Soil and Water Conservation District Highway 57 N &Lakeview Dr Petersburg, IN (812) 354-6728

Farm Service Agency Highway 57 N &Lakeview Dr Petersburg, IN (812) 354-6120

#### Sullivan County

Commissioner's 100 Court House Sq Sullivan, IN (812) 268-5677

Cooperative Extension Service 100 Court House Sq # 105 Sullivan, IN (812) 268-4332

Sullivan County Landfill Rr 3 Sullivan, IN (812) 268-6814

Sullivan County Solid Waste 375 E County Rd Sullivan, IN (812) 268-3966

Surveyor's Ofc 100 Court House Sq Sullivan, IN (812) 268-4029

Board Of Health 102 N Section St Sullivan, IN (812) 268-0224

Minnehaha Fish & Wildlife 2411 E State Road 54 Sullivan, IN (812) 268-5640

Sullivan County Soil and Water Conservation District 2316 N Section St Sullivan, IN (812) 268-6237

Farm Service Agency 2306 N Section St Sullivan, IN (812) 268-5157

#### **Conservancy Districts**

Lattas Creek Conservancy District, Janice Corwin 30 W. Indiana Ave. P.O. Box 174 Bloomfield, IN 47424 (812) 384-4634 ext.2

Lake Lemon Conservancy District, Bob Madden 7599 Tunnel Rd. Unionville, IN 47468

(812) 334-0233

Prairie Creek Conservancy District, Ed Lundergan Route #1 Montgomery, IN 47558

### Resource Conservation & Development Councils

Sycamore Trails RC&D 5 Depot St. Greencastle, IN (765) 653-9785

Hoosier Heartland RC&D 5995 Lakeside Blvd. Suite B Indianapolis, IN (317) 290-3250

Four Rivers RC&D 715 S. 9<sup>th</sup>. St. Petersburg, IN (812) 354-6808

#### STATE STAKEHOLDERS

#### **Governor:**

Frank O'Bannon OFFICE OF THE GOVERNOR INDIANAPOLIS, INDIANA 46204-2797

#### **House of Representatives:**

John Gregg-D, Dist.# 45 Vern Tincher-D, Dist.# 46 David B. Yount-R, Dist.# 59 Peggy Welch-D, Dist.# 60 Mark R. Kruzan-D, Dist.# 61 Jerry L. Denbo-D, Dist.# 62 Dave Crooks-D, Dist.# 63 John Frenz-D, Dist.# 64 Brent E. Steele-D, Dist.# 65

Indiana House of Representatives 200 W. Washington Street Indianapolis, IN 46204-2786 (317) 232-9600 (800) 382-9842 TDD Telehone Numbers TDD (317) 232-0404 TDD (800) 548-9517

#### **Senate:**

John Waterman-R, Dist #39 Lindel Hume-D, Dist. #48 Richard D. Bray-R, Dist. #37 Vi Simpson-D, Dist. #40

Indiana State Senate 200 W. Washington Street Indianapolis, IN 46204-2785 (317) 232-9400 (800) 382-9467 TDD Telehone Numbers TDD (317) 232-0404 TDD (800) 548-9517

#### Indiana Farm Bureau Inc.

225 S East St Indianapolis, IN 46202 (317) 692-7851

### **Indiana Department of Environmental Management**

100 N. Senate Ave P.O. Box 6015 Indianapolis, IN 46206-6015

IDEM Switchboard (317) 232-8603 or (800) 451-6027

Agricultural Liaison (317) 232-8587

Community Relations (317) 233-6648

(317) 233-0178

Compliance and

Air Management

Technical Assistance (317) 232-8172

Criminal

Investigations (317) 232-8128

Enforcement (317) 233-5529

Environmental

Response (317) 308-3017

Legal Counsel (317) 232-8493

Media and Communication

Services (317) 232-8560

Pollution Prevention and Technical

Assistance (317) 232-8172

Solid and Hazardous

Waste Management (317) 233-3656

Water Management (317) 232-8670

#### **Indiana Department of Natural Resources**

402 West Washington Street Indianapolis, IN 46204-2748

IDNR, Division of Soil Conservation, Field Representatives are generally located with the SWCD office in each county.		Division of Public Information and Education (317) 232-4			
Division of Engineering	(317) 232-4150	Division of Reclamation	(317)-232-1547		
Division of Entomology		Division of Safety and Training (317) 232-4145			
and Plant Pathology	(317) 232-4120	232-4120 Division of Soil Conservation			
Division of Fish & Wildlife	(317) 232-4080	Division of Oil and Gas	(317) 232-4055		
Division of Forestry	(317)-232-4105	Division of Outdoor Recreation	n (317)-232-4070		
Division of Historic Preservation & Archaeology	(317) 232-1646	Division of Nature Preserves	(317)-232-4052		
Division of Law Enforcement	(317) 232-4010	Indiana State Department of Health			
Division of State Parks and Reservoirs	(317)-232-4124	2 North Meridian St. Indianapolis, IN 46204 (317) 233-1325			

#### **FEDERAL STAKEHOLDERS**

Natural Resources Conservation Service 6013 Lakeside Blvd Indianapolis, In 46278 (317) 290-3200

Division of Water

NRCS Field Representatives are generally located with the SWCD office in each county.

(317)-232-4160

#### **U.S. Forest Service**

Hoosier National Forest Supervisors Office and Brownstown Ranger District 811 Constitution Avenue Bedford, IN 47421 (812) 275-5987 TDD (812) 275-7817 Fax (812) 279-3423

#### **Tell City Ranger District**

248 15th Street Tell City, IN 47586 (812) 547-7051

#### U.S. EPA Region 5

77 West Jackson Blvd

Chicago, IL 60604 (312) 353-2000 (800) 632-8431

### **U.S. Army Corps of Engineers Louisville District**

Dr. Martin Luther King Jr. Place Louisville, KY 40202

Naval Surface Warfare Center- Crane Division COMMANDER NAVSURFWARCENDIV CRANE 300 HIGHWAY 361 Crane IN 47522-5001

#### **OTHERS**

The Sycamore Land Trust P.O. Box 7801 Bloomington, IN 47407 (812) 336-5382

The Nature Conservancy Indiana Field Office 1330 West 38th Street Indianapolis, IN 46208 (317) 923-7547 Dennis J. McGrath, Vice President

# APPENDIX D FUNDING SOURCES

#### **FUNDING SOURCES**

This listing of funding sources was derived from the November 1998 *Watershed Action Guide for Indiana*, which is available from the Watershed Management Section of IDEM.

#### FEDERAL CONSERVATION AND WATERSHED PROGRAMS

Environmental Protection Agency

#### Section 319, 604(b), and 104(b)3 Grants

Grants for conservation practices, water body assessment, watershed planning, and watershed projects. Available to non-profit or governmental entities. These monies, enabled by the Clean Water Act, are funneled through the Indiana Department of Environmental Management. *For details see IDEM below*.

U.S. Department of Agriculture (See county listings for local federal agency contacts.)

**EQIP**: Environmental Quality Incentive Program. Administered by the Natural Resources Conservation Service. Conservation cost-share program for implementing Best Management Practices, available to agricultural producers who agree to implement a whole-farm plan that addresses major resource concerns. Up to \$50,000 over a 5- to 10-year period. Some parts of the state are designated Conservation Priority Areas and receive a larger funding allotments.

**WRP**: Wetland Reserve Program. Administered by the Natural Resources Conservation Service. Easement and restoration program to restore agricultural production land to wetland. Easements may be for 10 years, 30 years, or permanent. Longer easements are preferred. Partnerships with other acquisition programs are encouraged. Restoration and legal costs are paid by NRCS. Landowner retains ownership of the property and may use the land in ways that do not interfere with wetland function and habitat, such as hunting, recreational development, and timber harvesting.

**CRP**: Conservation Reserve Program. Administered by the Farm Service Agency with technical assistance from NRCS. Conservation easements in certain critical areas on private property. Agricultural producers are eligible. Easements are for 10 or 15 years, depending on vegetative cover, and compensation payments are made yearly to replace income lost through not farming the land. Cost share is available for planting vegetative cover on restored areas.

**WHIP**: Wildlife Habitat Incentive Program. Administered by the Natural Resources Conservation Service. Cost share to restore habitat on previously farmed land. Private landowners who are agricultural producers are eligible. Cost share up to 75%, and contracts are for 10 years.

**FIP**: Forestry Incentive Program. Administered by the Natural Resources Conservation Service. Cost-share to assist forest management on private lands. Funds may be limited.

Partners for Wildlife: assistance for habitat restoration.

#### STATE CONSERVATION AND WATERSHED PROGRAMS

IDNR Division of Soil Conservation

LARE: Lake & River Enhancement Program. Funds diagnostic and feasibility studies in selected watersheds and cost-share programs through local Soil & Water Conservation Districts. Project oversight provided through county-based Resource Specialists and Lake & River Enhancement Watershed Coordinators. Funding requests for Watershed Land Treatment projects must come from Soil & Water Conservation Districts. If a proposed project area includes more than one district, the affected SWCDs should work together to develop an implementation plan. The SWCDs should then apply for the funding necessary to administer the watershed project. Before applying for funding, the SWCDs should contact the Lake & River Enhancement Coordinators to determine (1) the appropriate watershed to include in the project, (2) if the proposed project meets the eligibility criteria, and (3) if funding is available.

IDNR Division of Fish & Wildlife

**Classified Wildlife Habitat Program**: Incentive program to foster private wildlife habitat management through tax reduction and technical assistance. Landowners need 15 or more acres of habitat to be eligible. IDNR provides management plans and assistance through District Wildlife Managers. See county listings.

Wildlife Habitat Cost-share Program: Similar to above.

IDNR Division of Forestry

**Classified Forest Program**: Incentive program to foster private forest management through tax reduction and technical assistance. Landowners need 10 or more acres of woods to be eligible. IDNR provides management plans and assistance through District Foresters. (See county listings.)

**Classified Windbreak Act**: Establishment of windbreaks at least 450 feet long adjacent to tillable land. Provides tax incentive, technical assistance through IDNR District Foresters.

Forest Stewardship Program & Stewardship Incentives Program: Cost share and technical assistance to encourage responsibly managed and productive private forests.

Appalachian Clean Streams Initiative: Funds for acid mine drainage abatement.

IDNR Division of Nature Preserves

State Nature Preserve Dedication: Acquisition and management of threatened habitat.

IDEM Office of Water Management

**State Revolving Fund**: Available to municipalities and counties for facilities development. Will be available in 1999 for nonpoint source projects as well. Funding is through very low-interest loans.

**Section 319 Grants**: Available to nonprofit groups, municipalities, counties, and institutions for implementing water quality improvement projects that address nonpoint source pollution concerns. Twenty-five percent match is required, which may be cash or in-kind. Maximum grant amount is \$112,500. Projects are allowed two years for completion. Projects may be for land treatment through implementing Best Management Practices, for education, and for developing tools and applications for state-wide use.

Section 205(j) Grants, formerly called 604(b) Grants: Available to municipalities, counties, conservation districts, drainage districts. These are for water quality management projects such as studies of nonpoint pollution impacts, nonagricultural NPS mapping, and watershed management projects targeted to Northwest Indiana (including BMPs, wetland restoration, etc.)

**Section 104(b)(3) Grants**: These are watershed project grants for innovative demonstration projects to promote statewide watershed approaches for permitted discharges, development of storm water management plans by small municipalities, projects involving a watershed approach to municipal separate sewer systems, and projects that directly promote community based environmental protection. NOTE: the application time frame for IDEM grant programs is annually, by March 31<sup>st</sup>.

#### PRIVATE FUNDING SOURCES

National Fish and Wildlife Foundation

1120 Connecticut Avenue, NW Suite 900, Washington DC 20036. Nonprofit, established by Congress 1984, awards challenge grants for natural resource conservation. Federally appropriated funds are used to match private sector funds. Six program areas include wetland conservation, conservation education, fisheries, migratory bird conservation, conservation policy, and wildlife habitat.

#### Individual Utilities

Check local utilities such as IPALCO, CINergy, REMC, NIPSCO. Many have grants for educational and environmental purposes.

Indiana Hardwood Lumbermen's Association
Indiana Tree Farm Program

The Nature Conservancy

Land acquisition and restoration.

Southern Lake Michigan Conservation Initiative

Blue River Focus Area Fish Creek Focus Area Natural Areas Registry

Hoosier Landscapes Capitol Campaign

Conservation Technology Information Center (CTIC)

'Know Your Watershed' educational materials are available

Indiana Heritage Trust

Land acquisition programs

**Ducks Unlimited** 

Land acquisition and habitat restoration assistance

Quail Unlimited

Pheasants Forever

Sycamore Land Trust

Acres Inc.

Land trust

Oxbow, Inc.

Land trust

SOURCES OF ADDITIONAL FUNDING OPPORTUNITIES

#### Catalog of Federal Funding Sources for Watershed Protection EPA Office of Water (EPA841-B-97-008) September 1997

GrantsWeb: http://www.srainternational.org/cws/sra/resource.htm

# APPENDIX E STAKEHOLDER COMMENTS

JAN 19 / 29 PM 01

January 16, 2001

301 Grays Dr. Gosport, IN 47433 (812) 879-5463

Mr. Jim Dunaway
IDEM
100 North Senate St.
P.O. Box 6015
Indianapolis, IN 46206-6015

Dear Mr. Dunaway:

I read the article in the Spencer Evening World on December 28, 2000 regarding IDEM's concerns about the Lower White River Watershed. Unfortunately, I was out of town for the January 4<sup>th</sup> meeting.

I live in the town of Gosport, part of Owen County. All residents within city limits have our water supplied by wells near the White River. It is of utmost importance to this community to restore the health of the Lower White River Watershed.

The other counties in the watershed area, along with Owen County, need to be concerned with all environmental impacts upon this area. Special consideration include construction of I-69 in a less environmental impacted area, urban development, increased population, runoff, zoning, roadside erosion, waste disposal, mines, quarries, etc.

It is imperative that we enforce rules that contribute to the quality of our water management.

Sincerely,

Lisa M. Schaupp

Liea M. Schaupp

R1 Boy 136 Longooter An 47553

IPEM - WRAS attn; Jer Dunaway P.O. Box 6015 Indianapolio, In 46206-6015

Dear Mr. Dunaway,

This is in response to the sticle in The

news paper regarding the meetings fan 3rd

kuk 43, asking for public comment.

I was unable to attend.

They question and comment is about the Creeks that feed the river. I have spoked to the Country extension agent and the Natural resources Conservation office before to see if there was any requirement to remove log-janso in the creeks, his fair as a Could be again there is no requirement, that formers seem to be so busy with everything else that they ignore some of this stuff or which sugar creek flows across, as I see problems

Dena L'Iorres

1./

#### Lower White River Watershed Restoration Action Strategy

## Attachment 1 U.S. Geological Survey National Water-Quality Assessment Program

Congress appropriated funds in 1986 for the U.S. Geological Survey (USGS) to begin a pilot program in seven project areas to develop and refine the National Water-Quality Assessment (NAWQA) Program. In 1991, the USGS began full implementation of the program. The NAWQA Program builds upon an existing base of water-quality studies of the USGS, as well as those of other Federal, State, and local agencies. The objectives of the NAWQA Program are to:

- Describe current water-quality conditions for a large part of the Nation's freshwater streams, rivers, and aquifers.
- Describe how water quality is changing over time.
- Improve understanding of the primary natural and human factors that affect water-quality conditions.

This information will help support the development and evaluation of management, regulatory, and monitoring decisions by other Federal, State, and local agencies to protect, use, and enhance water resources (Hirsch, 1997).

The NAWQA Program is assessing the water-quality conditions of more than 50 of the Nation's largest river basins and aquifers, known as Study Units. Collectively, these Study Units cover about one-half of the United States and include sources of drinking water used by about 70 percent of the U.S. population. Comprehensive assessments of about one-third of the Study Units are ongoing at a given time. Each Study Unit is scheduled to be revisited every decade to evaluate changes in water-quality conditions. NAWQA assessments rely heavily on existing information collected by the USGS and many other agencies as well as the use of nationally consistent study designs and methods of sampling and analysis. Such consistency simultaneously provides information about the status and trends in water quality conditions in a particular stream or aquifer and, more importantly, provides the basis to make comparisons among watersheds and improve our understanding of the factors that affect water-quality conditions regionally and nationally (Hirsch, 1998).

The White River Basin in Indiana was among the first 20 river basins to be studied as part of the NAWQA Program between 1992 and 1996. The USGS has published several reports and fact sheets, which address chemical, biological, and human factors within the watershed. The following is a partial listing of information available from the USGS NAWQA studies.

- Circular 1150, Water Quality in the White River Basin, Indiana, 1992-96.
- Report 94-4024, Water-Quality Assessment of the White River Basin, Indiana: Analysis of Available Information on Pesticides, 1972-92.
- Report 96-4192, Water-Quality Assessment of the White River Basin, Indiana: Analysis of Selected Information on Nutrients, 1980-92.
- Report 96-653A, Fish Communities and Habitat Data at Selected Sites in the White River Basin, Indiana, 1993-95.
- Report 97-4260, Environmental Setting and Natural Factors and Human Influences Affecting Water Quality in the White River Basin, Indiana.
- Fact Sheet 110-96, Occurrence of Nitrate in Ground Water in the White River Basin, Indiana, 1994-95.
- Fact Sheet 96-4232, Fishes of the White River Basin, Indiana.

- Fact Sheet 058-97, Trends in Acetochlor Concentrations in the Surface Waters of the White River Basin, Indiana, 1994-96.
- Fact Sheet 119-96, Influence of Natural and Human Factors on Pesticide Concentrations in Surface Waters of the White River Basin, Indiana.
- Fact Sheet 233-95, Occurrence of Pesticides in the White River, Indiana, 1991-95.
- Fact Sheet 209-96, Assessment of Water Quality at Selected Sites in the White River Basin, Indiana, 1993 and 1995 Using Biological Indices.
- Fact Sheet 124-96, Radon in the Fluvial Aquifers of the White River Basin, Indiana, 1995.
- Fact Sheet 138-96, Occurrence of Volatile Organic Compounds in Ground Water in the White River Basin, Indiana, 1994-95.
- Fact Sheet 084-96, Occurrence of Pesticides in Ground Water in the White River Basin, Indiana, 1994-95.

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#### References

Hirsch, R.M. *in* Fenelon, J.M., 1998, Water quality in the White River basin, Indiana, 1992-96: U.S. Geological Survey Circular 1150, 1p.

Hirsch, R.M. *in* Baker, N.T. and Frey, J.W., 1997, Fish community and habitat data at selected sites in the White River basin, Indiana, 1993-95: U.S. Geological Survey Open File Report 96-653A, Forward.